



# SBIR/STTR Session Overview

## FUNDED PROJECTS

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Metaheuristics – beginning phase-II on Lattice-Boltzmann Simulations

MP code, pre and post-processing, complex flows – **need pfc community input**  
2<sup>nd</sup> order interpolation, turbulence (UCLA)

Hypercomp – phase-II and new phase-I sq. channels with conducting walls, benchmarking-driven cavity and broken dam problems, heat conduction, k-e turbulence, free surface

2D and 3D (UCLA) How will code be available to DOE users?

PPI – engineered PS surfaces several 1000 Å thick,  $H_2 > 10\%$ , NSTX module B,  
(PPPL)

Starfire – conical theta pinch plasma with helicon preionization for ELMS simulator. Need stronger B field, .25MJ bank, 1 ms pulses possible. Seek phase-II for scale up to ITER. density needs to increase by 2 orders of magnitude,  $T_e$  increase by order of magnitude. Need help with diagnostics, pfc\$ or other source

(UUC)  
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